AN-AMERICAN fisherman

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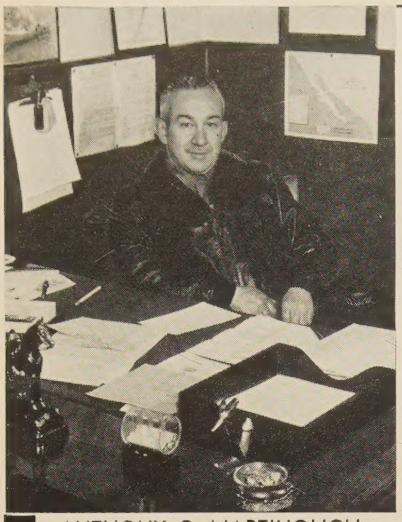

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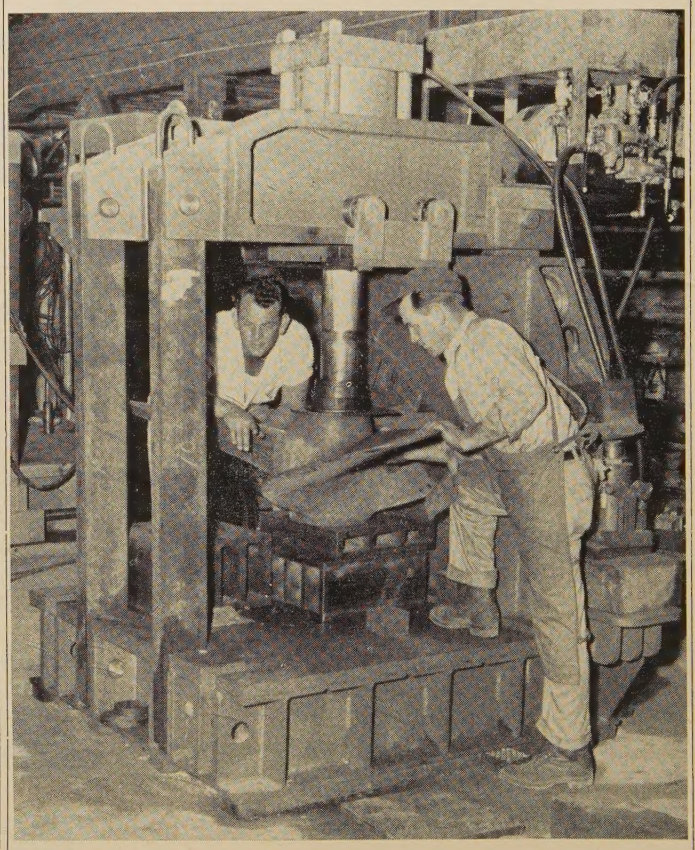

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PAN-AMERICAN *fisherman*

NEWSmagazine of PAN-AMERICAN FISHERIES combined with the magazine TUNAfisherman

MAIN OFFICE
205 Broadway Pier Bldg.
San Diego 1, Calif — Phone F-7328

A Journal Published Monthly
Serving the Pan-American Fisheries
A Marine Press Publication

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Volume 5 No. 7

TABLE OF CONTENTS

EDITORIAL 4
THE GLOBE 6
EBB'N FLOW 7
ADMINISTRATION 9
LAW 10
POLICY 11
SILHOUETTE 12-13
SCIENCE 14

COVER

Avondale, of New Orleans, new clipper, Mauritania.

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Portland Oregon; Seattle, Washington; Coos Bay, Oregon; San Francisco, Los Angeles, San Pedro, San Diego, Monterey, California; Aberdeen, Washington; New York City, Washington, D. C.; Boston, Massachusetts.

The magazine PAN-AMERICAN Fisherman, combined with TUNA Fisherman, is published monthly in Calif. Editorial and executive offices are at 205 Broadway Pier Building, San Diego 1, California. Radio-telephone identification, "PANAMAG." Telephone FRANKLIN 7328. Subscription, U. S. and Poss., 1 year $3.00, 2 years $5.00, 3 years $7.00 and single copies 35c. Entered as 2nd class matter, February 19, 1948, at the Post Office at San Diego, Calif., under the Act of March 3rd, 1879. In case of a change of address, subscribers are asked to notify Circulation Department, Pan-American Fisherman, 205 Broadway Pier Bldg., San Diego 1, Calif., within 10 days.

ABOUT THIS ISSUE:

BUSINESS success such as that of Carl Stockman could go to a man's head, unless, of course, he managed to keep busy enough to avoid it. On the surface, it would seem that Stockman has been both lucky and smart. At any rate, he has jumped a little green lure into a $100,000 business since 1944, and the strange part is that he is no more a salesman than a Chinese scientist. True, he had been a commercial fisherman for many years, but his background, previously, had little to do with what the American banker calls "cold, hard commercialism." In fact, Stockman's career is so speckled with unrelated career-work that, in some cases, it is astounding. At 12, he was helping his father earn the daily bread by hopping milk routes in the city of his birth, Pueblo, Colorado. One of five children, all of whom are living in California, his mother died of the influenza epidemic of 1918, and his father, who was a railroad man, was hard put to rear five lusty youngsters. Stockman's boyhood was more or less taken up with going to school, although he found time to make a few bucks currying horses for neighboring ranchers. When he was just short of seventeen, he got the rodeo bug, and, after leaving school, he began breaking Montana and Colorado broomtails for various ranches. In 1925, in the mood for a vacation, he came to California, and dropped anchor at San Diego, California, and here he decided to stay. But how to make a living breaking horses in Southern California was another thing, so he got into professional roller skating, with the result that, within a few years, he owned or managed several rinks. During this time also he put in some time as a forester, and he got into commercial fishing at the behest of his three brothers and a brother-in-law, all of whom are fishermen. The rest is history, and his story, brought up to date, is on page 12.

Edward Weber Allen, one of Seattle, Washington's, most widely-respected attorneys, and an authority on international law, has complimented this magazine with an article that should be read and digested by all interested in commercial fishing in these United States. As it would be indicated by Mr. Allen's profession, he has chosen to treat with some aspects of international law, and particularly as it applies to the so-called "three-mile-limit." An indication also of Mr. Allen's thinking is found in his opening remarks, i. e., "Perhaps our present troubles are partly due to disregard of principles of justice so fundamental to world peace and happiness. Donations and the squandering of billions of dollars to buy allies and friendships have proved to be futile substitutes. Instead, therefore, of deriding international law, it behooves those who desire a peaceful world to acquaint themselves with its progress and possibilities as well as with its defects and to use their abilities to eliminate the deficiencies. Some of these deficiencies are due to the way in which international law developed. It is the combined result of customs, conflicts, forces, reason, diplomacy and the aspirations as well as the selfishness of human beings. Withal, it is an everchanging mixture of the practical with the altruistic and should never be permitted to become static." So much for a bit of a tip-off on the article. Surely you'll find it interesting. It's on page 10.

On page 11 is a thorough going-over of the proposed 1951-53 budget objectives of the Washington State Department of Fisheries that gives out plenty of information as to what the gentlemen up North are about. "Despite," the Department says, "sixty years of public management, the . . . salmon resource has undergone a serious contradiction. With the decrease in supply has come an increase in complexity of management problems. Catch control has been passed against depletion."

—John Springer

The "Jap Situation": *Conqueror Re-conquered*

For several years now, this magazine has watched unfold a political panorama that, for outright stupidity, would put to shame a whole pasture of Mortimer Snerds, even though manipulated by a federal administration that has become world-famous for its immature statesmanship and wrong guesses. The katzenjammer alluded to has been known, in times past, by various names, the more common being the "Jap situation." Regardless of its labels, however, it has become the most palpable idiocy in commercial fishing history, and, if anything, the picture looks even worse today. This is far from an exaggeration; the facts speak eloquently. Our Southern California canneries, in the main, are glutted with warehoused canned fish, and few indeed will venture an estimate of when they will again go into full production. For this we can thank a pureblind, inefficient State Department, which has, while on the subject, even managed to botch up our international political status, with a World War barely six years behind us. Yet there are those in federal government who would place the blame for these huge inventories on commercial fishing's so-called failure to properly educate the public to the desirability of American-packed fish. Such opinion, of course, has some merit. The tuna industry has not blown its own horn too much. But that is not the basic reason, and it's time that the State Department stopped playing Blind Man's Buff and realized it.

The reason is Japanese fish, which has been pouring into this country in such gigantic tonnage lots as to very nearly cripple a strong American industry!

Let's look at the "situation" for a moment, not forgetting, to be fair, that Japan is not the only country that is cashing in on our State Department's mismanagement. Collectively, importations of foreign tuna has been estimated at 1,500,000 cases this last year. Of this produce, Japan was able to cut in from thirteen to twenty per cent on American tuna production. A number of canners, while admitting that any war-torn country should be rehabilitated and that, by virtue of her postwar democratic reaction, Japan is deserving of such, see these percentages as a deadly threat to their economic health. They cite, in illustration of their fears, the prices per case of this fish, and, in doing so, it would seem that they would have to go no further. Those prices, in New York city, for example, show that the Japanese are underselling Southern California tuna brands as much as $4.75 a case. Boiled down, this means that the Japanese are jerking out of the Southern California tuna industry roughly $1,000,000 a year, by virtue of price structure alone!

But that's not all, and if the 100 per cent duty increase on foreign fish after January 1, 1951, is supposed to correct the situation, then some government officials could be unpleasantly surprised. True, the increase from 22½ to 45 per cent ad valorum may represent a break in the Japanese wall. But it is, at best, merely an alleviation. Not satisfied with their fullback smashes at the tuna industry last year, they now want to do a little of what is known as "long-lining." Let's put this explanation in the words of Dr. W. M. Chapman, Special Assistant to the Undersecretary of State for Fisheries, Washington, D. C. Japanese tuna fishermen "now want to come long-lining into the Eastern Pacific, because they figure they can whip the American boats at fishing any place in the Pacific, even if they have to fish off the beach of North America, ship the fish home, and then ship them back to the United States," says Chapman. "It looks as if maybe they can."

This observation from Chapman, one of the best fisheries analysts in the business, came recently in letter form to a number of Pacific Coast fisheries executives. To emphasize and explain, he went on to state that informed sources in Tokyo say the Japanese have little worry about shipping canned tuna fish into the United States, even well under the United States production cost, and taking into consideration the 45 per cent tariff. Checking further, he also found other reasons. For one, Japanese fishing expeditions plumbing the waters of the Trust Territories, which our State Department ecstatically threw open to them recently, had hit the bull's eye. Indeed, it had taught them something. Modern equipment, they found, would enable them to set up, and put to good use, much more gear than in prewar days. When formerly, as an example, a vessel ran 300 baskets of long-line gear in a night, the top-flight boats last year ran 400 baskets, with an average of 350. On these expeditions, furthermore, they discovered excellent fishing, some junkets yielding up to seven fish per 100 hooks fished; the normal catch being four. "Taiyo Fishing Company bought top-quality Yellowfin under 80 pounds from the fishing vessels on the grounds for $120 per ton and sold them to an American firm for twice that figure, f.o.b. Japan," Chapman stated. "The fishermen made money hand over fist; so did Tokyo."

Dr. Chapman's statements sound more than a note of warning. The fishermen made money, he says. So did Tokyo. Those evaluations, at least to this page, tell a story. Certainly Japan has made money. Why shouldn't she? Japan, as a matter of cold, hard fact, could hardly help from making money, as our State Department, through SCAP, appears to be willing to cripple an American industry to see that she *does* make money. Currently, she's fishing all over the Pacific Ocean's hell's half-acre; she employs the cheapest possible labor; her canning standards do not remotely compare with American-packed fish; her products have hosts of America's price-conscious housewives corralled; she has been abundantly supplied with the best of American commercial fishing equipment to aid in her rehabilitation, and she has a first-class stable of fishermen. Therefore, it is little wonder, as Dr. Chapman states, that she worries little. It must be nice, of course, to be in that position. Many hard-working American fish canners probably would like to be in the same boat. Such, unfortunately, seems impossible, and specifically at the moment.

Fact is, the American commercial fishing industry is being hamstrung by the "Japanese situation," and for political reasons masked as humanitarianism. We are, whether we like it or not, forced into economically rehabilitating Japan almost single-handedly. The reason for this is that Japan has no in-

(*Continued on page 20*)

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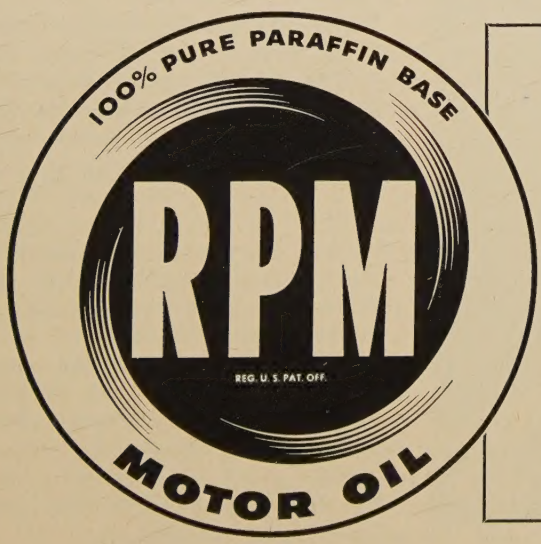

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The GLOBE

An International News File compiled by FOREIGN BUREAUS of Marine Press Association

Oslo, Norway.—Most of the large Norwegian fleet which has been fishing off western Greenland has had a very satisfactory season, news release from the Norwegian Information Service reports. It is estimated that the 1950 catch will total 12,000 tons of cod, or about twice as much as last year. Some halibut was caught, too. The Norwegian refrigerated vessel Kolastind brought about 200 tons of halibut from Greenland to New York—the first time in 25 years that Norwegians have tried to ship frozen fish directly from the fishing grounds.

Matzatlan, Sinaloa, Mexico.—Mazatlan's shrimp season opened early in October with 125 boats going to sea, a November 7 American consular dispatch from Mazatlan reports. Last season only 80 boats operated. In addition, about 25 boats are still under construction, and approximately an equal number have not yet arrived from the United States where they were purchased.

The construction of a new freezing plant is actively underway in Sinaloa, and it is expected to be ready for operation by February 1, 1951. The plant will freeze 18 metric tons of shrimp and 25 tons of ice a day. It will have a storage capacity of 250 tons of ice and 200 tons each of frozen and fresh shrimp. An investment of 5,000,000 pesos ($578,500) was made in this plant, which includes the purchase of ten fishing boats.

A smaller freezing plant is also under construction in Sinaloa and will be ready for operation by November 20. It will freeze five tons of shrimp a day, and will have a storage capacity of 30 tons of fresh shrimp and 40 tons of frozen shrimp. This project involves an investment of 400,000 pesos ($46,280).

Another freezing plant, scheduled to begin operations on November 15, has a storage capacity of 600 tons of frozen shrimp and 300 tons of ice, and will freeze 25 tons of shrimp and 30 tons of ice a day. An investment of 3,000,000 pesos ($347,100) in this plant included the purchase of eight fishing boats.

One company exported on consignment 180,000 pounds of shrimp during the month of October. Shrimp at present is being bought from the fishermen at 5.50 peses a kilo (29 cents per pound).

Bristol.—Great Britain's (England, Scotland, and Wales) landings of fishery products during the third quarter of 1950 showed a slight increase from the second quarter, although there was a marked decrease during the month of September, an American Embassy dispatch from London states. This decline was caused by September's bad weather and high winds, which severely handicapped the fleet's catch of herring, although they appeared in their usual large numbers. Most boats have averaged only four days fishing a week since the season started. Total consumption of fish, including cured fish, during the quarter, showed little change. The demand for fish is still good but the consumer is showing a reluctance to pay the increased prices. Housewives are again showing signs of boycotting fish as a result of prices, which in some extreme cases, have risen over 200 percent. The increase results from shortage of supplies caused by continued bad weather at sea and the recent laying-up of trawlers. The rise in fish prices can also be attributed to a large extent to the fishermen's labor dispute in Iceland. Iceland is the biggest supplier of fish to the United Kingdom. This Icelandic tie-up occurred when the British fleet was not catching a sufficient supply for consumer demand. The Icelandic seamen's dispute was settled on the first of November and fish imports from that country are beginning to arrive in Great Britain. As a result of this recently heavy increase in fish prices, a warning hint has been given to fish dealers by the Economic Secretary of the Treasury that the Government is considering a return to controls where they seem to be necessary.

Trieste, It.—The Marshall Plan is aiding the rise of a new industry in Trieste by contributing towards the construction of three new fishing boats to specialize in tuna fishing, according to a November 24 ECA news release. These vessels, being built in Italy, are the first of their kind to be built in that country. The 90-ton boats will have engines forward, as in American tuna vessels, and will form the basis of a new tuna industry in Trieste. The Marshall Plan has contributed some $80,000 in counterpart funds toward the $250,000 cost of the boats. Construction of the boats will provide over 14,000 man-hours of employment for specialized workers in a Trieste shipyard.

Canada.—Production: October production of the sea-fisheries of Canada (other than Newfoundland) totaled 74,780,000 lbs. with a landed value of C$6,326,000—39.6 percent lower and 53.5 percent higher, respectively, than the comparable figures for the same month of 1949. Including the reported value of supplementary landings (livers, viscera, seals, Irish moss, etc.), the total value for October is C$6,372,000, according to the October 1950 Monthly Review of Canadian Fisheries Statistics.

For the first ten months of 1950, landings totaled 1,059,910,000 lbs. (valued at C$58,118,000) as compared with 994,133,000 lbs. (valued at C$47,426,000) during the same period in 1949.

Pacific Coast: During the month, Pacific Coast landings of 36,228,000 lbs. were 49 percent lower, but the value of the catch (C$4,554,000) was 101.4 percent higher than for October 1949. There was a huge decline in the catch of one of the cheaper species, herring, and a big increase in the landings of one of the most valuable fisheries, that of chum salmon. However, latest reports would indicate that the herring season merely was late in starting this year. For the ten months ending with October, the total catch of 394,973,000 lbs. and value of C$30,505,000 are 5.1 and 34.4 percent higher, respectively, than for the like period of 1949.

Atlantic Coast: On the Atlantic Coast the catch of 38,552,000 lbs. and C$1,772,000 were lower by 27.0 and 4.7 percent, respectively, than for October 1949. Sardine and cod fisheries catches showed the largest declines. For the ten-month period under review a total of 664,937,000 lbs. (Valued at C$27,613,000) were landed—7.6 and 11.6 percent higher, respectively.

PAN-AMERICAN *fisherman*
NEWSmagazine of PAN-AMERICAN FISHERIES

Accidents, Appointments, New Blood

RECORD?

Forecast:

A record-breaking tuna pack of 8,500,000 cases this year, if, of course, production kept up to its present rate, was forecast by Secretary of Interior, Oscar L. Chapman. The picture looked dark, however, due to strikes and full cannery inventories as late as December 30. Fish & Wildlife Service figures estimated that the 1950 pack probably would be 1,000,000 cases larger than last year's 7,290,000 case haul, even if tuna fishing quieted down by January 1. The record catch would not make up production lost in canned salmon. The 1950 salmon pack was the smallest since 1921, and 75,000,000 pounds less than 1949. Tuna increase was guessed at 25,000,000 pounds.

FISH FINANCING

Tap on the U. S.

Whether Congress would hold still or not was another question. But the Inter-American Tropical Tuna Commission wanted $102,000 to launch the job; the money would go toward staffing and the establishment of headquarters of the group at Terminal Island, California. Purpose of the group would be to carry on research and mutual negotiation problems. Represented on the roster were Mexico, Costa Rica, and the United States, according to Lee Payne, member of the California Fish & Game Commission, and a member of the Inter-American body. It would be, he added, about six months before a suitable headquarters could be set up, even after funds were laid on the line. The money, if made available by Congress, would last about one year.

FIRE AND EXPLOSION

Mary V:

Both vessels, the *Genevieve H* and the 42-foot, 31-ton *Mary V*, were southbound when the fire hit. A crew member of the *Genevieve H* saw smoke spurting from her companion, and, upon sounding the cry, the *Genevieve H* hurried over. It was none too soon. Twelve miles off Todos Santos Bay, late in November, the *Mary V's* crew, Captain J. Silva, John and Manuel Silva and Frank Hawkins, barely had time to make their skiff when the craft exploded in plumes of smoke and hot flame and sank within minutes. There were no injuries.

Sudden:

Landed at Ensenada, Baja, California, Mexico, Silva said the explosion happened by virtue of gas escaping from the ice machine, and that it started in the vessel's engineroom. "It happened," he reported, "so rapidly we had no chance to extinguish the blaze." Built in 1946 at Wilmington, California, the craft was valued at $55,000. There was a matter of $37,000 insurance on the property and its equipment, Silva said.

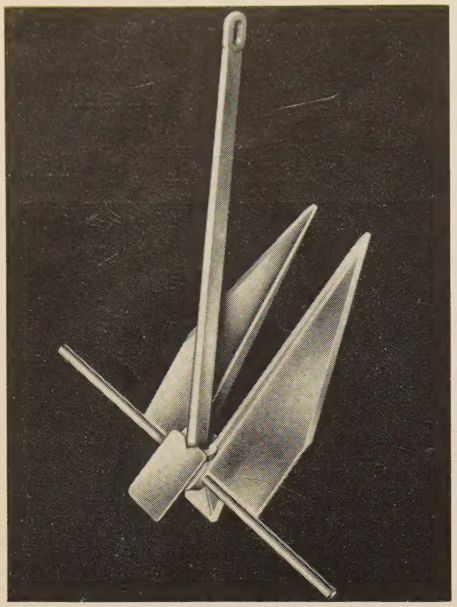
NEW BABY

J. R. Barry & Company:

Shrewd, food-wise J. R. Barry of Los Angeles lost no time. When, on October 31, the E. M. Darrimon company, of which he was President, was dissolved, he had an ace already up his sleeve, and, on November 1, he put it into action. Result: the J. R. Barry & Company of Los Angeles. Barry would be associated with a number of former Darrimon employes in the venture, notably Fritz Selig and Robert B. Orr; both would cover the local trade. The organization would act as brokers and sales agents. In the matter of fish products, it would plug the products of California Marine Curing & Packing Company, whose tuna pack brands were "Priority," "Adventure" and "Sea Magic," and its "Rose Bowl," on sardine and mackerel.

(*Continued on next page*)

Businessman
J. R. Barry of Los Angeles



Equipment
Danforth "Hi-Tensile" anchor.

NEW BLOOD

Development:

Port Hueneme, California, long proud of its surrounding scenery but concerned about its business and industrial future, spit on its collective hands, and chortled. Things were looking up. Two northern fish cannery operators had ideas to open plants in the hamlet; outfits capable of producing 600 tons of fish a day by the next season. Moreover, there were further indications that two additional canneries might be similarly developed, due to the shortage of fish in northern waters.

Sponsors:

George Christo, President of Northern Packing Company, said that, at the moment, he was studying sites and costs preparatory to transferring his plant down from San Francisco. Now trucking fish from Port Hueneme, Christo's cannery would employ around 250 people about 10 months of the year in packing tuna, sardine and mackerel. Sal Ferrante, President of Oxnard Canners, Incorporated, who ran a cannery at Port Hueneme before the war, advised the commissioners that he would erect and equip a cannery at Port Huenme. He, too, was reported studying costs of location sites and building.

Locations:

The canneries, due to the necessity of a big supply of salt water, would have to be near the ocean, the canners agreed, in order to carry on a proper fluming and washing. The firm of Nelson Products of Ventura, California, was estimating building costs for Ferrante, and was working with him in selecting a site, John Herdfelder, staff member, said. The Ventura firm, it was thought, also was working with other cannery operators in estimating costs and seeking locations. These, however, indicated that they did not wish to publicly announce their plans as yet. There were already two canneries operating in the Oxnard area and in the Port Huene area, and it was thought possible that there could be six in that territory within the coming 12 months.

NEW PRODUCTS

Danforth:

Recent tests of Danforth "Hi-Tensile" Anchors showed some interesting results. By using tremendously strong, special alloys throughout, a saving in weight was obtained without a reduction in either overall dimensions or in holding power. Pound for pound, the Danforth "Hi-Tensile" model proved to have a holding power of nearly twice that of the famous Danforth "Standard" model. On the basis of these tests, which were made by independent engineers in San Francisco bay, the Danforth Company tabulated the costs of various anchors in relation to their holding power. The average per-pound cost of holding power for various anchor types came out as follows: Stockless, 22c to 24c; Yachtsman's Kedge, 10c; Kedge, 5c to 8c; Danforth Hi-Tensile, ¾ to 1c. A folder giving full details was available at the *Boat Shows*, or from Danforth Anchors, 2121 Allston Way, Berkeley, California.

Carlson-Collins:

A complete new line of all stainless steel galley ranges was available to boat owners through the Carlson-Collins Company, galley range manufacturer, of 1760 Kettner Blvd., San Diego. According to George Carlson, the all stainless steel galley range met requirements of boat owners for a range highly resistant to marine corrosion. It also was an aid in "following the trend of today's skipper to maintain his boat in gleaming cleanliness." The Carlson-Collins Company additionally announced a fast and efficient service for all types of galley ranges.

DIFFICULTIES

Internal:

Two of Astoria's major packing plants would not handle bottom fish this winter. The New England Fish company and Columbia River Packers association listed high operating costs during the winter and price demands of fishermen as reasons for the closure. The New England Fish company would close down a major portion of its operations, Henry Goodrich, company vice-president, said. Prices demanded by local 50 of the Otter Trawlers union were too high, according to spokesmen from both firms. The Columbia River association planned to utilize most of its filleting line crews on other operations, including tuna packing. New England would retain only a skeleton force of "about 15 key men" during winter and used a peak summer crew of 160. Goodrich expressed optimism over long range prospects for bottom fish packing and said he was confident that draggers will reach an agreement in March, 1951.

FEDERAL INVENTORY

Fish & Uncle:

Elaborate plans were in the making; culmination of them meant the first nation-wide inventory of fisheries resources since 1931.

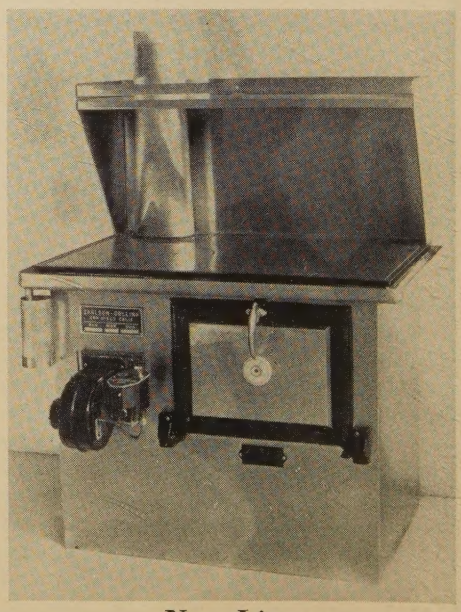
Interior Secretary Oscar Chapman said that a complete statistical survey of the fishery industry would be undertaken soon with money appropriated by congress in the fiscal government spending bill. The fish and wildlife service of the department would conduct the survey which would be expanded beyond the annual regional studies that had been made in past years.

The survey would cover ocean and inland fisheries and all the data assembled would be made available to the industry and the public for reference. While the survey would include the salt and fresh water fisheries, a close tabulation of fishery resources on the Pacific coast would be emphasized.

Research:

The coast fisheries, tuna and salmon, would be given close scrutiny because the value of the annual commercial production in these two fields. The yield from these two fisheries alone normal-

(*Continued on page 25*)



New Line
Carlson-Collins range.

The Defense Fisheries Administration is one of four new defense agencies established on October 4, within the Department of Interior to carry out functions vested in the Secretary of Interior under the Defense Production Act of 1950. Others are Defense Minerals Administration, Defense Power Administration, and Defense Solid Fuels Administration. Each of the new agencies is to be headed by an Administrator appointed by, and reporting directly to, the Secretary of Interior. Here's the fisheries picture, as prepared by V. J. Samson, Fish & Wildlife Service, San Pedro, California.

Fish & Defense

By V. J. SAMSON

AN action program for the new Defense Fisheries Administration, formally established on December 4, is rapidly being shaped up, and a staff of fishery experts from the Fish and Wildlife Service has been detailed to organize the program, Secretary of the Interior Oscar L. Chapman announced on December 7. Chapman has appointed Albert M. Day, Director of the Fish and Wildlife Service, as administrator of the new agency. Day is expected to name Milton C. James as Deputy Administrator, Fred F. Johnson as program director, and Leroy S. Christey as assistant program director.

"All of these men," stated the director, "served in various capacities during World War II, in the coordination of fisheries, and are well qualified to handle their new assignments because of their extensive experience in Federal fisheries work, their intimate knowledge of the problems involved, and their wide acquaintance in the fishing industry."

James, who became an assistant director of the Fish and Wildlife Service in 1945, has been with the agency since 1923. During World War II he was detached from his regular duties as Chief of the Branch of Game fish and Hatcheries, and detailed to Washington, D. C. as one of three coordination officers in the supervising the activities of the Facilities Branch, in the Office of the Coordinator of Fisheries (OCF).

JOHNSON, Assistant Chief of the Service's Branch of Commercial Fisheries, has been with the agency since 1920. In 1935 he became assistant chief. As a reserve officer in the U. S. Navy, he was called to active duty in April 1942, and served during the war as liaison officer between the Navy and the War Production Board and the Departments of Agriculture and Interior, on matters pertaining to the procurement and distribution of fishery products. In 1944 Commander Johnson's detail was broadened to permit him to advise the OCF on problems that interfered with the maximum production of fishery commodities. These included the charter of purchase, or the return of, fishing vessels by the armed forces; the construction program for new fishing vessels; the allocation of fishing vessels between ports in controlled production programs; and application and recommendations for controlled and critical materials. Johnson returned to his former position with the service in December 1945. In April 1948, he was assigned to Portland, Oregon, as Assistant Regional Director. When the Pacific Oceanic Fishery Investigations, headquartered in Honolulu, Hawaii, got under way late in 1948, he was transferred to that program as its assistant director. In June 1950, he was recalled to Washington, D. C., to assist in handling the service's expanding program of comemrcial fishery activities.

LEROY Christey joined the service in 1934, after his graduation from the University of Washington where he was an economics major. His early assignments included fishery research in Alaska and at the Fishery Technological Laboratory in Seattle. In 1940 he returned to Alaska as leader of the King crab investigations. In December 1942, he was detailed to the Washington office of CCF where he was concerned with the handling of priorities and materials and equipment requirements for the fishing industry. In April 1945, he resigned from the service to become general manager of the Pacific Exploration Company in Seattle, Washington, which was engaged in exploratory fishing operations. On November 1, 1948, upon his return to the service, Christey was appointed as deputy administrator of the Philippine fishery program in Manila. In April 1950, when this program was being terminated, he joined the Fisheries Division of SCAP in Tokyo as an industrial specialist and head of the Branch of Materials and Facilities. On October 31, he transferred to the service's office of foreign activities in Washington to assist in planning Point Four programs.

Defense responsibilities consisting of certain priority, allocation, claimant, requisitioning, and other functions as related to fish production, were delegated to Secretary Chapman by the Secretary of Agriculture, Charles F. Brannan, on October 13. Under the Defense Production Act of 1950, basic responsibilities for food were entrusted to the Department of Agriculture by the President's Executive Order No. 10161, of September 9, 1950.

In addition, the delegation enables the Secretary of the Interior, through the Defense Fisheries Administration, to encourage production of fishery commodities to fulfill requirements for military, essential civilian, and foreign needs, as these may be determined by the Secretary of Agriculture. Responsibility for tin container supply and materials and facilities used in common for processing fish and other foods, and for fish procurement and distribution, are retained by the Secretary of Agriculture. Day listed some of the things that the Defense Fisheries Administration intends to do about keeping fishery commodities in sufficient supply to satisfy the country's emergency needs.

(*Continued on page 24*)

Administrator

Albert M. Day, (right), Director, Fish & Wildlife Service, Washington, D.C., recently appointed Administrator of Defense Fisheries Administration, discusses problems with Dr. Lionel A. Walford, fishery biology chief.

Too Long Has International Law Been Treated As a Joke. It's Time the World Recognized . . .

Sovereignty in Fishing

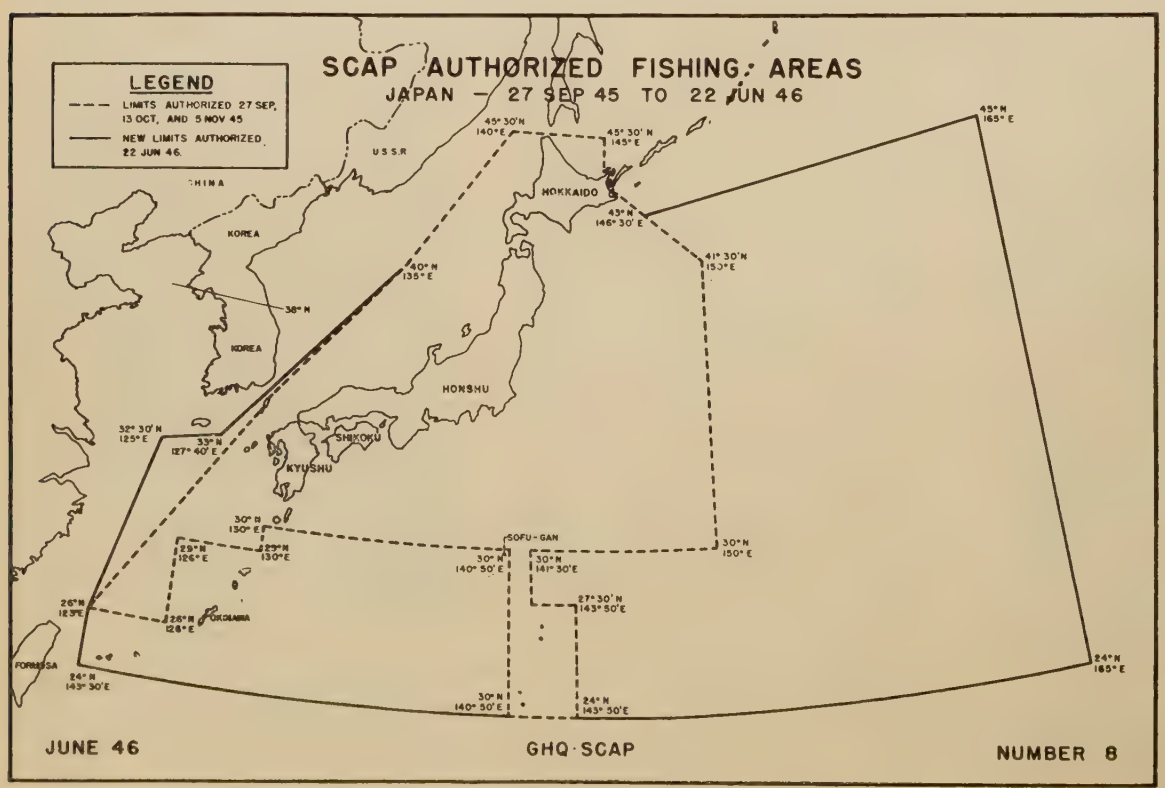
By EDWARD WEBER ALLEN

MANY people, including, I regret to say, some lawyers who should know better, joke about there being no such thing as international law. To be sure, some of its attributes differ from those of municipal law, and defects certainly are apparent. Nevertheless, it does exist and, despite shortcomings, it does respond to a definite need in world relationships, both moral and practical. This can be particularly true in the matter of fisheries conservation. Certainly one of the regrettable features of the San Francisco meeting at which the United Nations Charter was formulated was that the emphasis was placed on international politics instead of international law.

Perhaps our present troubles are partly due to disregard of principles of justice as fundamental to world peace and happiness. Donations and the squandering of billions of dollars to buy allies and friendships have proved to be futile substitutes.

Instead, therefore, of deriding international law, it behooves those who desire a peaceful world to acquaint themselves with its progress and possibilities as well as with its defects and to use their abilities to eliminate the deficiencies. Some of these deficiencies are due to the way in which international law developed. It is the combined result of customs, conflicts, forces, reason, diplomacy and the aspirations as well as the selfishness of human beings. Withal, it is an ever changing mixture of the practical with the altruistic and should never be permitted to become static.

So we find that, in the days following the discovery of America, Spain, Portugal and England, were asserting nationalistic title to huge ocean areas, attempting to shut off each other and all other European nations from most of the world. However, it was not so much these world circling contentions as it was contests over the herring fisheries of the North Sea, which were particularly responsible for stimulating Hugo Grotius and other great legal writers of the Seventeenth Century to expound their theories as to ocean waters. And it is nothing to their discredit that they espoused views favorable to their own nationals. (*Continued on page 15*)



Former Territories

Map shows fishing areas extended Japanese by Scap in 1945-46. Since then, even more extensive grounds have been thrown open to compete with American fishing industry.

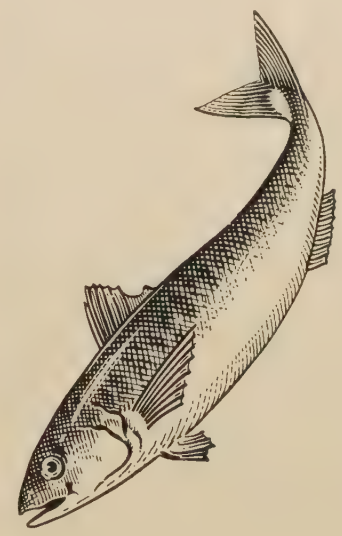
What Price Salmon?

A Report of Fishery Problems, Management, Goals and Proposed Budget for 1951-53, By the Washington State Department of Fisheries

DESPITE 60 years of public management, the Washington State salmon resource has undergone a serious contraction. With the decrease in supply has come an increase in the complexity of management problems. Catch control has been passed by rehabilitation as a major weapon against depletion. The problem of maintaining the fisheries at an economically productive level today is neither simple nor inexpensive. It has become significantly related to the resource development and industrial growth of the entire state; fishery administrative policies, too, must now be conceived on levels embracing programs of international and regional cooperation.

THERE are many factors affecting the supply of salmon, among them the following: 1. The development of power dams, flood control dams and irrigation projects has cut off hundreds of miles of available spawning areas, retarded or prohibited adult migration, affected downstream migration, and caused formidable changes in stream conditions. 2. The development of agricultural and suburban land and the deforestation of great areas has lowered the consistent flow of streams and made torrents out of them at some seasons of the year, while turning them into trickles during the heat of the summer and early fall. The result has been to reduce the ability of streams to receive spawners and to rear their young. 3. Pollution in certain areas of the state, oftentimes in or close to the mouths of the rivers, has caused the destruction of small fish, and is today interfering with the rehabilitation of many streams. These are all environmental conditions which have directly affected the salmon: to them can be added fishing pressure, sports and commercial, in the face of static or declining runs.

There are other causes for the state of the fishery resource that might be placed under the heading of public policy. Simply stated, they point to the fact that an adequate program of fisheries management and rehabilitation has never been supported financially. Although such a program has been conceived on paper, the funds necessary to make it anything but a biologist's dream have never been forthcoming. In this case, the finger in the dyke hasn't been able to stop disaster. Instead of getting better, the situation has become worse. And it will continue to do so unless more money is poured into the fisheries program.



By the end of this year, the state will have 16 hatcheries and research stations devoted to the artificial propagation of salmon. The state has had hatcheries for nearly 60 years. They never have been able to stop the decline in production. This is not because they have no useful place in the preservation of salmon, but because they don't attack the complex of other problems that have been eating away the runs. Hatcheries do not open up streams, build fish ladders, conserve water, screen ditches, or constructively attack any of the other sources of competition in the salmon's home environment. Hatcheries are only stop-gap instruments unless they are combined with other positive measures. The present-day peril which threatens the future of this great resource cannot be handled by closures or planting—by themselves. That is the lesson that 50 years of salmon management has taught.

THE facts have been known for some time, but the matter of implementing a program that will tackle all the problems on a long-rang basis has been seriously hampered by the small investment—or re-investment—in rehabilitation work. The wholesale value of fish products in 1949 was more than $100,000,000; yet only $1,800,000 was appropriated for *two* years for fisheries work. Add to these figures the value of the recreational fishery and the importance of saving this resource may be realized in its true scope.

There are two general paths which the people of the state may follow in handling their salmon problem. First, they may accept the idea that the salmon must naturally fall before the inroads of civilization. By this path, the people of the state can expect only one outcome: the imposition of progressively more drastic catch regulations to the point where eventually the salmon will exist in only limited quantity.

The second path is recognition of the resource in its true light, with the people insisting that coordinated effort be ex-

(*Continued on page 18*)

SILHOUETTE

By JOHN SPRINGER

•

Hodge-Podg

Carl M. Stockman's Ship Chandlery Might His Books

IF Carl M. Stockman, citizen and home-owner of National City, California, had been doing business during the Victorian Era of Merry Old England, he would have been listed by the Chamber of Commerce, had one then existed in the city of his choice, as a "merchantman shopkeeper." By the same token, had he been making his living by trade in our own Gay '90's period, he probably would have earned the sobriquet, "general merchandiser." By 1944, with a career embracing professional skating, bronc-busting, forestering and commercial fishing to his credit, he could fill the bill as an inventor, of the variety that has been known to whoop with glee over two thin dimes to rub together. In this year, *Circa* 1951, when even such operations as boring holes in doughnuts is considered a specialized vocation, it would be hard to catalogue his business.

Currently President and General Manager of Fishong Lures, Incorporated, 3109 "D" Avenue, National City, he calls himself a ship chandler. Paradoxically, nothing could be more of a misnomer, and, at the same time, no identification could be nearer to the mark. His business is worth something over $100,000, which he has built since 1945 to include one warehouse, with another to be ready by early summer, 1951, and he employs several dozens of people, directly or indirectly. For the past year, however, his home has looked more like a warehouse than a warehouse, and, indeed, during the past year he has spent, to quote his black-haired wife, about as much time in his warehouse as in his home, whether eating, sleeping or working. In short, he runs what could be called a commercial madhouse, of a kind that would cause any suicidally-inclined efficiency expert to instantly hang himself. But his books look as nice as any business with twice the spit and polish.

"I'll stock anything that I can sell and make a dime on," he says. "It doesn't make any difference to me where I store it, and I've found that businessmen worry too much over appearances, policy and orderliness."

This proof of this pudding, of course, is not difficult to determine; it is the reason in short, that his firm is growing like a weed. An inspection of his business would reveal around 2,300 ships chandlery items alone, including such widely diversified items as a soap that works without water, a life preserver that can be carried in the palm of the hand, seaman's clothing, groceries, and several makes of nationally-known engines. Mixed into this conglomeration also are such totally unrelated items as remote-control toy planes, training rifles, fresh meats and birdseed, and he's continually adding to the list. This last Christmas he added, as a matter of fact, trees to the list, and even laid in a stock of bangles, just in case of a call by some late-arriving fisherman. One reason for his fast turnover, of course, could be that, if he "doesn't stock it, we'll get it."

SEVERAL months ago, a commercial fisherman came into his store and asked for a pair of all-wool trousers, with canvas piping. "Never heard of them," said Stockman, "but we'll have 'em for you within a week. If there are any in the U.S.A., that is." A week later, the fisherman got his pants. Stockman had unearthed them in a New York surplus store.

A stickler for fast delivery service, Stockman provides a plane service to crippled boats, large or small. Two months ago he got a summons from three boats off San Geronimo island. With Carl Morgan of National City Flying Service, he loaded up and took off. Several hours later the vessels — *Melody*, *Princess* and *La Belle*—were healthy again, and the Morgan-Stockman expedition took off again for San Diego, California. A ground swell, however, caught them as they taxied about, and tipped over the craft, damaging one pontoon. After righting the plane and trying it again, they finally got into the air. But only to get into more trouble. Over Ensenada, Baja California, Mexico, they ran out of gas, and were forced to land with a dead stick. The jolt, naturally, very nearly ripped out the belly of the craft, and they had to make it back to port by automobile.

Barely in town, another call came in, this time from Turtle Bay. Off they went again, this time in the late afternoon. By the time they arrived at the ship in distress, it was dark. For an hour they buzzed a little village, near where the vessel was tied up, before the natives awoke to the fact that they wanted lights. These eventually were provided by a pair of old trucks, with their headlights directed from opposite ends of a small field, and they made a landing, delivered the parts, and again took off. Arriving back at the National City airport, an attendant remarked to Stockman, "Buddy, you're pushing your luck." To which Stockman replied, "My luck's always good. I've got a payroll to meet each week." Proud of his punctuality in delivery, whether it be parts or groceries, hatches or butter churns, Stockman tells his fishermen customers: "Remember, you're only as far away from repairs as your radio." Aware of difficulties involved getting squared away after disembarking from a fishing boat that has been out for months, he recently installed in his office a personalized service. The move enjoyed an instant popularity, and currently he is hotly-pressed to buy plane tickets, make phone calls and write letters at the request of fishermen, who find themselves short of time, and need some errand-running. One of his future plans includes the launching of a floating parts ship, which will cruise widely, and carry a substantial stock of parts.

Stockman's first piece of salcable merchandise, and one which he gives credit for putting over his business, is, of course, the Fishong Lure. Where he got the idea for the lure is a deep, dark secret with him, but the fact remains that it is one of the most popular items of its kind on the market, and, moreover, it is steadily growing in popularity, particularly in the East. The story of the lure is the story of his business, and it goes back to 1944. Stockman then was fishing from Guy Silva's big sea-going greyhound, *Emma R. S.* At the moment, Stockman, who had ended up in San Diego to start up a skating rink, had been commercial fishing for some eight years. On one dark, still night, he began turning over in his mind the advisability of devising a new-type lure, and, in the next few days, he had

Kitchen Midden

a Chubasco-Damaged Ten-Cent Store, But ully Good

his plans in shape. Therefore, he went to Silva with the idea of a lure made of plastic, green in color, and sardine-size with a white underbelly. It would, he told Silva, also be hinged, fore and aft, to give it a swimming motion when in the water.

SILVA, a man who is noted for his interst in new equipment of any nature, mulled over the idea, and finally told Stockman to go ahead and manufacture some of the things, and that he would try them out. In port again several months later, Stockman turned his home into a workshop and set up his first model. Like many first attempts, however, the lure, used aboard Silva's craft, was a disappointment; the body motion left much to be desired. After disembarking once again, he set about to remedy the lure's defects, and, when he thought he had it down, he went aboard the *Galapagos*, at that time owned by Ed Pierre of San Diego. The results, needless to sav, were more gratifying.

"What we wanted," explains Stockman, "was a lure that would look just like live bait, which means sardines, herring, anchovies and other species.

"As every commercial fisherman knows, in using squid as bait, the fish won't bite after two or three tons are hauled aboard. Apparently the things get wise to the fact that the squid is not a live fish, which necessitates changing the squid to a live bait hook. This change takes time, and the necessity of constantly baiting hooks slows things up. With our lure, fish keep on biting, because it looks like live bait. Trials have shown that, on the average, about eighteen tons of fish can be caught, before the fish quit biting.

"What's more, the method of fishing with squid now used often amounts to as much as three-thousand pounds a day. Of course, when the fish are hot, only as much as one third of that amount may be used. With the Fishong lure, about one-third of that figure must be utilized. It is, therefore, obvious that more fish will be caught out of each school, on account of the greater amount of fish that can be caught in a given time with this device," he contends.

The current squid, Stockman says, is weak because of its lack of durability, and he points out as an example that a vessel's crew will be forced to squander as many as twenty-five squids a day. This he contends, is due to the tearing of feathers and deterioration while in the water.

"Speed and precision," he concludes, "are the marks of good fishing. Good equipment is often the success of any fishing vessel."

TO that it may be said that, at present, his stock of equipment is extensive enough to bear him out. When word of the lure, and subsequent try-outs by tuna-wise skippers became known, he had no trouble getting orders. One of them came from an Eastern chandler very recently, to the tune of $15,000. This lettuce, of course, he plunked right back into the business, an operation that he has rigidly adhered to since he began building his chandlery business. "You've got to have stock," he says. "Regardless of what they want, you've got to stock it to be successful in satisfying tuna fishermen especially." If the looks of his warehouse is any criterion, he isn't far from right.

Merchandiser

Stockman at office displays lure to George Eacobellis, *Pan-American Fisherman*'s admiring photographer.

Pink Tickets & Predictions

A ROMANCE of the ocean depths written on a manuscript about four inches square, is gradually unfolding on the California Coast, and, with no final episode in sight, the unfinished narrative provides marine biologists with documented stories about ocean fish which give concrete information on abundance of various species, tendencies toward declining or increasing supplies, and other vital facts.

These four-inch-square pieces of paper are a dull pink in color and the information on them, tabulated by the hundreds of thousands for 35 years, is the harvest record that helps scientists plan for better fish crops, provides data for that purpose, and helps predict future yields. This method of compiling California's fish history has brought scientists to this coast from many states, and from foreign countries including Australia, New Zealand and Russia.

THE story and the miniature manuscripts are found at the marine laboratory of the California Division of Fish and Game on Terminal Island. It is being chronicled among the fish canneries which benefit most as the narrative unfolds. Facts revealed on the pink slips are of great aid to the Fish and Game Commission, and the Legislature, in providing proper regulations for sport and commercial fish, and keeping track of the state's fifth industry.

Standard business machines, ordinarily employed in the drab routine of an office, are the guiding factor in unfolding the state's biggest fish story. They sort thousands of cards by fish species, and other categories, with an uncanny metallic intelligence, and print clear, accurate accounts of what is happening to certain kinds of fish in certain parts of the Pacific Ocean.

They have helped both in providing proper regulations and in preventing expensive, unnecessary and damaging

The California Division of Fish & Game, Terminal Island, has an underwater investigation system that would do credit to the F.B.I. Here's an article that explains something of its methods in recording deep-sea romances, travels, etc.

regulatory legislation. At the Terminal Island Laboratory is much of the equipment and personnel engaged in research on marine fish. Here are men working on sport fish, those who know what sport fish are abundant, and why and what to do about declining populations. Here is the young lady who can tell you the age and sex of a sardine, the sardine skeleton specialist, and the man who knows all about jack mackerel. All of these, and many more, have information which bears directly on matters pertaining to sustained yields of sport and commercial fish. Here, also, is the fisheries library and office of Dr. Frances N. Clark, the small, alert lady who guides the broad and important work of the laboratory.

AN employee of the California Division of Fish and Game for 25 years, Dr. Clark is in charge of all the far-flung functions of the Terminal Is- the pink slips reign supreme, and plot land laboratory. This includes operation of research vessels, and statistical work concerning the little pink tickets. It is in the statistical building where their story of the ocean depths. Thousands of the slips are tucked away in their permanent homes in the basement. Having established the first system of its kind in the world, they have composed their annals of fish history. However, they become more valuable with age, because they are the documents that record California's fish and fishing fortunes. A close look at these small pink slips reveals they are just receipts—receipts given to commercial fishermen by dealers who buy their fish. The receipt forms are supplied by the Division of Fish and Game and the dealer is required by law to fill out one for every transaction he makes. The ticket carries an individual number, and has this information:

Where the fish were landed, date, gear used in the catch, fisherman's name, kinds of fish, weight of each kind, price paid for each and the dealer's signature. In addition, the receipt has the number of the boat, which is assigned to it by the Division of Fish and Game. From the day it is registered, for as long as it remains in California Fisheries, each boat carries the same Division number, regardless of ownership or other changing factors. This, incidentally, provides an accurate history of each fishing boat.

Insignificant by themselves, the prosaic pink tickets can be combined to form fabulous tales of the sea in the nation's most important commercial fishing area—the California Coast. In the statistical building, all information from a pink ticket is placed on four cards, providing a four-way "chaindex" cross index. On the "chaindex" cards is recorded identification of the individual boats. They are used as a four-way cross index, and information on the pink tickets is transferred to numerical code and cut into the punch cards.

Cards are run through the sorting machine and then through the electric tabulators, which print neat summaries which tell the story. Basis of the system is analysis of boat catches to establish catch per unit of effort. Since standards have been established through years of statistical compilations, Dr. Clark can

(*Continued on page 22*)

SOVEREIGNTY

(*Continued from page 10*)

EVENTUALLY, politicians and diplomats came to favor the idea that a nation should own so much, but only so much, of the ocean adjacent to its coast as it could defend from the shore. This was sometimes expressed as the range of cannon, or three miles. Thus was born the so-called "three-mile rule." During the last century and a half, it became strongly advocated by the big navy nations, because it held to a minimum the waters from which their fishery and other vessels might be subjected to regulation or exclusion.

It should also be noted that ocean fishery conservation is really a very modern concept, for until recently it was pretty generally believed that such fisheries were inexhaustible. Nevertheless, there has always been strong opposition to the three-mile limitation. In spite of certain dogmatic assertions to the contrary, it is open to argument whether there has been such general world acceptance of this particular distance as would justify its being termed an established principle of international law.

Complimentary to the idea of a nationally owned marginal sea, whether three, four or ten miles in width, has been the concept that, in the open waters beyond, there can be no national ownership, but that the nationals of any country may fish there without limitation. Here again, however, it is unwise to be dogmatic, for two reasons: First, because there is substantial precedent for the view that, although a nation may have no ownership in the ocean waters beyond its marginal belt, it may, nevertheless, have special interests which it is entitled to protect beyond that belt; and, second, because as previously indicated, international law is always in a state of flux; it is based upon practicalities as well as theories, and when it becomes apparent that an absolutely enormous natural food reservoir can either be maintained in continuous production or can be ruinously curtailed, sensible people will be found to devise ways and means for protecting the supply.

LET us, therefore, not be too discouraged by the pessimistic pronouncements of government officials or college professors who have no comprehension of the factual situation or of the food and industrial potentialities of the sea. Instead, let us view briefly what has been accomplished and what appear to be some of the possibilities.

We find it has been conclusively demonstrated in the case of salmon, halibut, whales and fur seals that it is possible to rehabilitates the depleted stocks of such ocean fish and marine mammals. We also find that this has been accomplished in some cases by the action of a single coastal nation; in some cases by bilateral or multilateral treaties whereby each nation separately agrees to restrict its own nationals; and in some cases, notably that of the Pacific Coast halibut and the Sockeye salmon, by joint international management.

But, the theorists say, there are antique principles of international law which will legally permit of the complete frustration of these noble examples of conservation. The best answer is that these are examples of success and that the few attempts to violate these efforts have themselves been failures. I refer particularly to the British-Norwegian threat to disregard the International Fisheries Commission regulation of our North Pacific halibut and the actual invasion by the Japanese of the Bristol Bay red salmon fishery. Each failure in attempting to apply an obsolete principle to such a current situation tends to invalidate the principle itself and to establish the validity of the new system of accomplishment.

AND so we find a presidential fishery proclamation of September 28, 1945, which deserves some attention, even if the government departments which were charged with its implementation have failed to respond. The basic concept is that some coastal fisheries should only be fished to a limited extent, which I believe biologists refer to as the *optimum*, otherwise the future supply will be depleted. If, therefore, a fishery is being so fished, no additional food supply will result but, on the contrary, a valuable food supply will be decreased, if additional fishing is permitted. Hence, where nationals of one or more nations have developed such a fishery to its *optimum* or beyond, it is an unjustifiable economic waste to permit nationals of other countries to invade such a fishery.

On the other hand, where a coastal fishery has not been fully developed, so that it is not being fished to its *optimum*

(*Continued on next page*)

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then there is no justification for the coastal nation to object to nationals of other countries entering the fishery, providing always that they remain outside of territorial waters. The proclamation asserted that this country was willing to apply these principles upon a reciprocal basis.

It has been stated that international law is a mixture of the practical and the altruistic. Perhaps it is simpler and better to say that, generally speaking, international law is an attempt to apply common sense to international relations —to be just and reasonable but not to be silly or gullible. In this light we may approach the most imminent international situation which confronts the fishing industry of the Pacific Coast—the matter of a Japanese fishery treaty. What is the situation and how can it be handled in conformity with international law? It is well known that there are two types of philosophy in this country, both inside and outside the government circles. There are those who believe that it is neither isolationistic, unreasonable or immoral to maintain the integrity of American industry so that this country will really be able to give the world at large sound and effective leadership. Then there is the Henry Wallace type of philosophy which apparently conceives that the way to create a happy world is to sacrifice American industry to foreigners.

This latter type of thinking was well illustrated by the immaculate young man who said that it would be "ungentlemanly" to negotiate a fishery treaty with Japan until the Japanese were in position to refuse to do so. The practical situation is that the Canadian and United States fisheries of this coast, sardines, herring, coastal tuna, halibut, salmon and others, are being fished to their *optimum* or more by the fishermen of these two countries; that the intrusion of Japanese fishermen into these fisheries would not increase production on a continuous year-to-year basis; that for their fishermen to come clear across the Pacific Ocean would only be possible because of their low standards of living and would, therefore, necessarily tend to reduce the standards of living

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of our own fishermen; that they already have a greater fish poundage production out of their own coastal fisheries than we have from ours; that our prewar experience was that Japanese fishery operations were destructive and inconsistent with sound fishery conservation; that the Japanese could substantially increase their own coastal fishery production if they would apply proper conservation measures; and that, if they should come over and deplete our coastal fisheries, it would probably result in our own fishermen going across the ocean to raid the Japanese coasts, a reciprocity of the type that no one wants.

THE legal situation is that peace treaties historically have dealt with many subjects other than a mere paper peace; that Japan itself in its two peace treaties with Russia of 1905 and 1925 specifically incorporated fishery provisions; that there is nothing in international law ot prevent any two (or more) nations from making treaties restricting fishing by their own nationals and vessels; that there is nothing in international law to prevent Japan from entering into a perfectly simple yet effective and reciprocal treaty that, until otherwise agreed, its fishing vessels will stay out of the coastal fisheries of Canada and the United States and, in turn, these two countries will keep their fishing vessels out of Japanese coastal fisheries; that this can readily be done and should be done as a part of the peace treaty or at the same time.

If the leading fishery nations bordering the Pacific Ocean take timely steps to avoid disputes in that most fertile field for conflict, coastal fisheries, other fields can be investigated with more deliberation and some treaty procedure can be evolved for dealing with the noncoastal fisheries as research may, from time to time, indicate necessity.

It is announced in the press that a Japanese peace treaty is imminent. If, as indicated, international law permits inclusion of provisions such as have been discussed, there is perhaps nothing better that could be done to create that international good will across the Pacific that is desired by the citizens of Japan as well as by those of Canada and the United States. International law can and should facilitate such sound diplomacy.

TO neglect this opportunity is to court trouble and to threaten the future peace of the Pacific. International law can be misused to obstruct progress, but it can also be developed to keep abreast of world conditions and to promote world peace.

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WHAT PRICE?

(*Continued from page 11*)

erted to preserve the environment of the salmon as the population of the state further increases.

The present fisheries administration is committed to a rounded program that includes more hatcheries, more stream improvement work, more research—not just in salmon but in all fishery fields. This program, like others before it, is still on paper. It will remain there unless the value of the fisheries is recognized in its full stature, and money is granted which will do the whole job, not a tenth of it. The program is well-rounded, and it is positive: it proposes to improve conditions, as a whole, not just preserve the status quo.

The program of the Department of Fisheries as proposed for the next two years is based upon the following assumptions: That fish are crop which is self-renewing in its natural state. As a wealth-producing resource, it ranks third in importance in Washington. That the fishery resource, however, no longer abides under natural conditions. Strict management is now necessary to protect it against the competition of other industries, paramountly power. That in the case of salmon, environmental changes are the main cause for depletion of the resource. The effect of these changes has been to place undue emphasis on catch control features of fish management.

That rehabilitation is as natively a principle of sound fishery management as conservation; the former implies a gain, the latter a static condition. The salmon problem particularly lends itself to solution through rehabilitation.

AND, finally, that not enough support has been given in the past to make an *adequate* fisheries program possible. If the resource is to be perpetuated at a level which will enable it to support both commercial and recreational consumption, greater financial investment in the program is imperative. Specific areas of activity and future objectives of the fisheries program are set forth in the following sections:

The control of water usage and maintenance of access are key functions of the Department's stream improvement division. No other phase of the general fisheries program, as it relates to salmon, exceeds it in importance. It is a part, however, that has been most neglected in the past, and must be greatly accentuated in the future. Once water supply and natural habitat are appropriated by other uses, the salmon resource is the irremediable sufferer. Main points of the stream management policy: 1. Close regulation of changes in stream channels, as empowered by law. Passage of migratory fish must be guaranteed by those barring or otherwise altering the normal flow of the stream. Screening and by-passing of fish in irrigation and other water diversion channels also is enforced. 2. Laddering of existing barriers or removal of those that are not permanent in nature. That this work is far behind schedule is unfortunate, because hundreds of miles of spawning and rearing grounds lie behind obstructions that can be either cleared or by-passed. 3. Survey of water use applications. A minimum flow provision is contained in all new permits to assure an adequate flow at low-water stages. 4. Field studies to determine methods of increasing the water retention capacity of salmon-producing streams. 5. Cooperation with other agencies, such as the U. S. Soil Conservation Service and agricultural groups, in coordinating water usage on a mutual need basis.

Hatcheries are an essential phase of rehabilitation work and run maintenance in the salmon fishery. In the future, out of necessity, they may become even more important as a substitute for natural environment which is no longer available. The Department has endeavored to lay out a hatchery program that fits immediate area requirements, and which, at the same time, is improving its own efficiency. This program calls for the following physical expansion and technical adjustment: 1. New hatcheries in neglected watersheds, such as Hood Canal, the Noodsack, Stillaguamish and Nisqually Rivers, and southwest Washington. 2. Emphasized biological research on techniques of rearing salmon, including chum and pink salmon. 3. Additional stream research to determine how artificial planting can be made to produce more adult fish. 4. Careful choice of location and functional, economic construction of all future stations.

TO assure the proper utilization of the fishery resource on a sustained yield basis, the following research pro-

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jects must be carried out: 1. Establishment of a spawning-bed inventory that will allow an accurate check of returns of salmon to their home streams. This will give data on the productive condition of streams and enable the Department to sensibly arrange its hatchery-planting program. 2. Compilation of catch statistics by areas and more thorough accounting of the sports fishing take. This is particularly vital to the management of silver and chinook salmon runs. 3. An interim action program on all management matters, which are undergoing biological analysis. While additional scientific data are being obtained, the Department must proceed along lines which offer the greatest possibility for temporary benefits. 4. Extension of biological investigation into areas of the fishery that have been neglected because of insufficient personnel. This must be done as a sustained program.

Part of the management program lies in the effective enforcement of fishery conservation regulations. The role of enforcement is particularly important at present when many of the fishery stocks are below normal, and rehabilitation of salmon runs is being attempted. Patrol activities have undergone improvement, but neither the personnel nor the equipment is numerically adequate to handle the complex requirements of guarding a fishery that extends from the Cascade Mountains to Cape Flattery, and from the mouth of the Columbia River to the boundaries of that watershed in this state. The task is made more difficult by the fact that the peak of stream poaching activities coincides with extensive commercial and sports fisheries, both of them demanding close attention.

It is essential that the present patrol force of 20 persons, including administrative officers not in the field, be expanded and additional floating and communicational equipment provided to make its work more effective. The late director, Alvin Anderson, completed the draft of a $4,633,000 budget prior to his death in October. This constitutes official Department of Fisheries objectives for the next two years. During the past two years, the Department has operated on a budget of $1,808,000, exclusive of Lower Columbia River Fisheries Program and Lewis River Hatchery funds.

THE proposed new budget includes $2,967,000 for salaries, wages and operations, and $1,665,700 for capital outlay. (Note: Federal support moneys for Lower Columbia River work, and the Lewis River Hatchery fund, also reimbursable to the state, are not included, nor is money for participation in the Pacific Marine Fisheries Commis-

(*Continued on page 21*)

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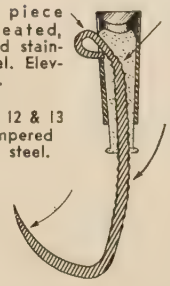

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EDITORIAL

(*Continued from page 4*)

dustry, other than fishing, that is large enough to bring her quickly enough to the economic standards desired by our State Department. Ergo, commercial fishing has been forced into a Santa Claus suit that, it might be said, has been punched and torn to the extent that the seat is gone. And what next?

An answer to that might be taken from the attitude of a certain sweet young man who recently stated that a bona-fide treaty with Japan was out of the question, "until she is in position to refuse it." His objection, moreover, carried with it the opinion that such action would be "ungentlemanly." Yet a treaty, of one nature or another, seems eminent, at least if the arrival of three Japanese fisheries figures on our shores is a criterion. If it goes through, will American commercial fishing get a fair shake?

Not if a duty of even 45 per cent ad valorum is instituted! The shocking fact is that the Japanese can still undersell us at that duty figure! The answer to the dilemma should be obvious, even to an organization so infected with jackassery as those who have tinkered with the "situation" since the war. In other words if the State Department sees an advantage to the United States in building a strong Japan, then let it be so. But not at the expense of a single industry!

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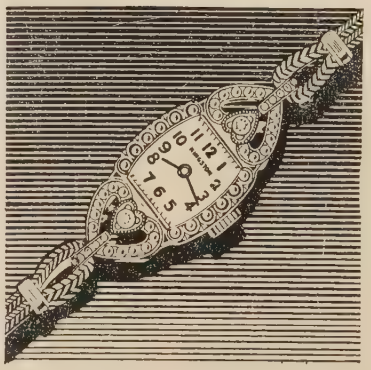

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WHAT PRICE?

(*Continued from page 19*)

sion.) The operations requests are divided as follows: Administration, $322,943; research, $595,573; construction, $299,793; hatcheries, $905,908; patrol, $503,720; statistics, $90,902; stream improvement, 249,107. Additional personnel would amount to 77 full-time employees; the Department staff now numbers approximately 150 persons.

Capital outlay items would provide for increased production of hatchery fish, extensive stream improvement work, and an enlarged scope of scientific research. Proposed are three new 12-pond freshwater stations and a 10-pond saltwater station, and the addition of 44 rearing ponds at existing stations. The increase in rearing capacity over the present 163 ponds would exceed 60 per cent. (Note: A battery of 10 ponds will permit rearing of 1,050,000 chinook salmon to 90 days of age and 350,000 yearling silvers.) The maintenance and rebuilding of many runs will depend to a large extent on the ability of the Department to transfuse streams with stocks of artificially reared salmon. It is planned to further emphasize the production of chinook, the most seriously depleted of all native species.

The new stations would include one on Finch Creek at Hoodsport for $348,000; a second on the Nisqually-Deschutes River watershed at McKenna Springs for $178,250, and a third on the North Nemah River in southwest Washington for $265,650. The Finch Creek station would comprise 12 freshwater and 10 saltwater rearing ponds. Hatcheries which would receive additional ponds and other improvements include Green River, Kendall, Skykomish, Simpson and Willapa.

The proposed budget includes $143,000 for construction of fishways in western Washington, and $33,000 for stream clearance work. Streams which would benefit include the Stillaguamish River system and Chuckanut Creek in north Puget Sound; Siebert Creek. in Clallam County; the Duckabush and Dosewallips and other Hood Canal streams; the Mashel River on the Nisqually system; the Skookumchuck, Naselle, Nemah and Hupmtulips Rivers in coastal Washington, and streams in the Lake Washington watershed. Other phases of the stream improvement budget would continue the screening and fishway program in eastern Washington and stream flow gauging work.

BIOLOGICAL research would be extended to important fisheries on which little or no study has been possible in recent years. These include research on black cod, herring, ling cod, silver smelt, soup fin shark, the bottom fishery, hardshell clams, crabs, shrimp and the ocean troll fishery. These investigations would be in addition to those on salmon and their environment,

razor clams, oysters, pollution and the Columbia River fishery, which are continuing studies. Finally, to better arm the shellfish program, a new laboratory is sought on Hood Canal which would replace the present outdated station near Gig Harbor. In conclusion, the restoration of the salmon runs that have frequented the waters of the Pacific Northwest should continue of paramount importance, not only to the recreational and comemrcial fishermen, but to the citizenry as a whole. The perpetuation of this outstanding natural resource is a challenge that calls for the utmost effort and cooperation of all who are concerned with the progressive growth of Washington State, whose resources remain its greatest hope for future prosperity.

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PINK TICKETS

(*Continued from page 14*)

determine easily and quickly variations in abundance of any species. If a standard fishing effort catches less fish of a certain kind, this may be one indication the species is less abundant. This also indicates, if areas are considered, where a species of fish is located at any specified time, and carries biological indications such as food supplies and habits of migration.

These conclusions can be further checked by two other methods, both of which are used to excellent advantage at the laboratory to complement the statistical method and for other purposes.

One of these is the study of sizes or age groups in the catches. With changes of the proportion of each age group to

the total population, and, consequently, to the catch, it can be readily seen that the analysis of age groups in catches is a sensitive index to future fishing conditions. If the proportion of small fish runs higher than normal in catches, it indicates less abundance of older fish or an exceptionally successful spawning. The biologists must ascertain which to be in a position to recommend management practices, which will encourage full utilization of the resource, yet not endanger the future supply.

The third method is the tagging of fish. When a thousand fish of one species are tagged, and a hundred of them caught, it indicates, besides the biological data accumulated, that probably 10 percent of the population of that species was caught during the period. When all there methods agree on any one subject, the results are conclusive. It is significant that all three coincide accurately.

The excellent record of the California Division of Fish and Game on predictions of fish populations which permits consistent, long-range policies, is based on this study. Biologists at the Terminal Island laboratory regard the ocean as being similar to a livestock range, on which all things must be kept in balance. Breeding stock and the young must be kept in proper proportion to the available food and the harvest amount must be consistent with this balance.

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FISH & DEFENSE

(*Continued from page 9*)

"First on the list will probably be the job of trying to keep the fishing industry supplied with the steel, copper, brass, zinc, aluminum, fibers, and other strategic materials and facilities, as well as manpower, which it requires to produce the fishery products the country must have. We must see, however, that no more of such materials are diverted to fishery production than are justified in the light of other defense requirements.

"Following the pattern established during World War II, the statistical, marketing, and other economic data which are regularly collected by the Fish and Wildlife Service will be augmented to lay a basis for setting production goals, estimating potential food supplies, developing estimates of the industry's requirements for scarce materials, and for determining the desirability of fish allocation and concentration programs."

DURING World War II, fish allocation programs were carried out for sardines in California and halibut in the Pacific Northwest. The sardine allocation program provided for the even distribution of raw fish to plants in California, thus reducing gluts and providing maximum production. The halibut allocation program, by restricting primary handlers to those of historical record, tended to keep distribution in normal nation-wide channels. In Alaska, salmon concentration programs provided for the coordinated production of the packs of canned salmon in certain centrally located canneries, thus saving manpower, transportation, scarce materials, and other facilities. "These types of programs will again be placed in action, if needed," Day said.

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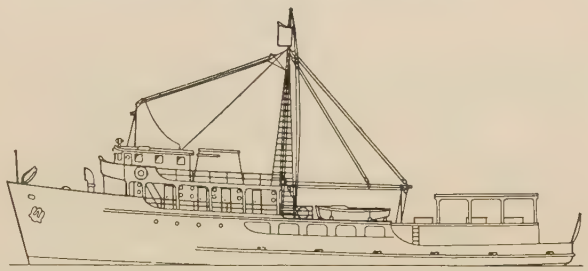

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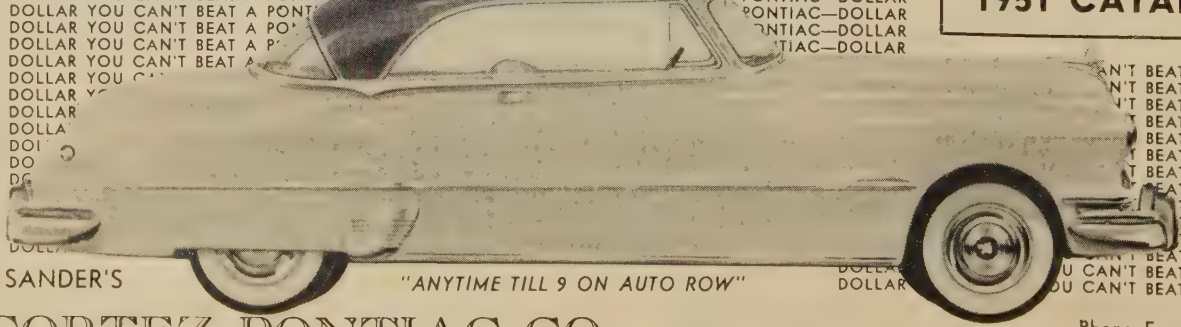

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EBB'N FLOW

(*Continued from page 8*)
ly was the highest from a standpoint in the nation each year.

"The availability of statistics during World War II—provided by the department's constant activity in collecting, compiling, analyzing and issuing production and distribution data on American fisheries—helped federal agencies to accomplish the difficult task of supplying food, regulating prices and administering an important phase of the war effort," Chapman explained in announcing the plans for the survey. "During peace, as well as in periods of national emergency, statistics on American fisheries enable the industry to determine trends and to assist its members in arranging their activities to take advantage of changing business conditions."

Regulation:

Some fishery industry representatives interpreted Chapman's remarks to mean that the government planned to lay the groundwork for regulation of the private commercial fisheries during the present emergency through the survey.

They pointed out that the information collected will enable the government to fix prices and regulate production under the guise of a national emergency. In any event, the field agents of the department planned to visit the principal fishing localities of the nation, including San Pedro and San Diego, where most of the nation's tuna was caught and processed commercially, in order to assemble statistics on the volume and the value of the catch of fish and shellfish, employment in the fisheries, quantity of fishing gear, number and classifications of fishing and transporting craft, and the volume and value of manufactured fishery products and by-products. Actually only two such complete surveys—in 1908 and 1931—had been made of the nation's fisheries resources.

PROMOTIONS

At Seattle:

Nearly fifty maritime reporters, public relations men, public information officers, free-lancers, editorialists and photographers formally organized themselves in Seattle into an as-yet-unnamed group whose purpose would be to meet and act on promotional problems involving Puget Sound's extensive deep-sea fishing and pleasure boat waterfronts, and to achieve a unified approach to the complexities and demands of press, public relations and editorial work in the maritime field. The organizational meeting was held at the Washington State Press Club in Seattle on December 13. R. H. Salkins, probably dean of American waterfront reporters, was elected Honorary Life Skipper of the new organization. Calkins, now contributing editor to the *Marine Digest*, Seattle maritime weekly, recently retired from his long time post as Marine Editor of the *Seattle Times*. Calkins had spent a total of 41 years on the Seattle waterfront as a marine reporter for the *Times* and *The Seattle Post Intelligencer*. "America's biggest cities are big because they are port cities," Calkins said. "Part of the job our new organization will be to achieve unification of the efforts of our members as they tell the story of 'what ports, waterfronts and maritime commerce mean to the people'." One of the first projects to be tackled by the new maritime press group will be the establishment of an annual award to the area's "Maritime Man of the Year." It was expected that the first award would be made in 1951, at the Annual Maritime Day Dinner.

BUSY BATE

Legislator:

John Bate, a man already so tied up with work that he had been forced to sell his golf clubs, got another job hung on him late in November. Port Director for San Diego, California, Bate was appointed chairman of a small boat committee to assist in formulation of suggested legislation to regulate operation of small craft not subject to U. S. inspection. M. W. Dabney, President of the California Association of Port Authorities, made the appointment. Bate would have plenty of highly-trained help, quite naturally. Others to serve with him were A. H. Abel, General Manager, Port of Oakland; Earl Manning, traffic manager, Port of Long

(*Continued on page 28*)

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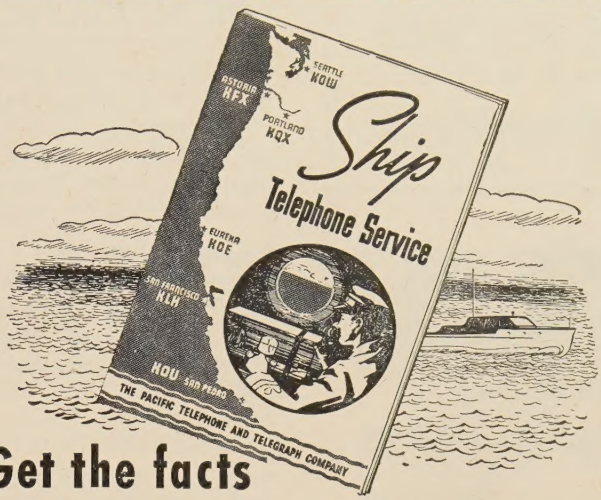

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EBB'N FLOW

(*Continued from page 25*)

Beach; A. O. Pegg, Commissioner, Port of Los Angeles, and E. E. Ferrari, Manager, Port of Stockton, California. Meantime, if Bate had any time on his hands, it could be spent very easily.

Expansion:

The Harbor Commission decided to build three more tunaboat piers. These would be erected adjacent to Grape Street and Harbor Drive, in San Diego, and Bate was told to come up with bids for the project. These would be paid for from $500,000 earmarked last September to care for improvement of the port's maritime facilities. The steadily-growing fleet of small fishing vessels made the operation necessary, the Commission said.

OCEAN POPULATION

Gangway!

Captain Henry G. Sorenson came into San Diego, California, with a look of frank astonishment on his usually impassive face. A mariner for many years and currently top dog on the Quaker Line steamer, *Elmer A. Sperry*, Sorenson, who had admitted that he'd seen everything, or so he had thought, added a new one to his collection of experiences. On the bridge of his intercoastal freighter late in November, he had been startled by what looked like a portion of the ocean boiling, about 160 miles Southeast of Point Loma, and 40 miles west of Cape San Quentin, Baja, California, Mexico. As a matter of fact, the ocean was boiling, but it wasn't agitated by heat. Fish! Thousands of them.

"Both the first mate and I agreed that the school was at least eight miles in length and two miles wide," Sorenson explained. "The surface of the sea was a continuous ripple. With the aid of our binoculars we also saw an unusually large school of porpoises right in the middle of the dense mass of fish. We counted 50 porpoises leaping out of the sea in the space of a few minutes. I have never seen anything like it in the years I have spent at sea."

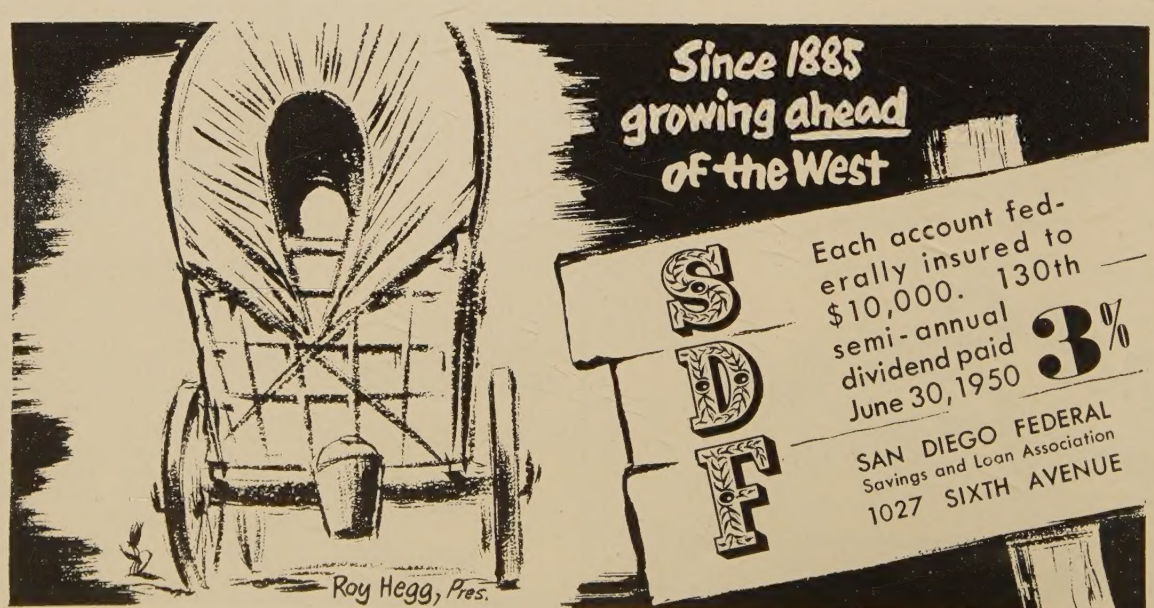
Hullaballoo

The news affected the waterfront in a manner that could have been expected had it been jabbed, individually and collectively, by a power drill. In a matter of seconds, the information had been relayed by radiotelephone to local fishing craft anchored or cruising in Baja, California waters, and speculation over what species the school belonged to ranged from skipjack to small-sized albacore or yellowfin. Investigation of the phenomena, of course, wasn't long in coming. Headed by the tuna clipper, *Costa Rica*, a fleet of fishing craft moved out to sea. By the time the vanguard of the fleet arrived, however, the school had thinned and spread out. But it was agreed that the huge school actually was a merger of two schools of skipjack.

BRANCHING OUT

Joe Medina:

When big Joe Medina, one of the most successful fishermen in the San Diego, California, fleet, and a man who later became a wealthy clipper owner, set up Medina Enterprises, Incorporated, he apparently meant the "enterprise" part to mean just that. His latest venture was superintending construction of a reduction plant on the island of Pico, in the Azores. Reported to have laid in new-type machinery from Portugal, which squeezes the oil out of whale blubber, the venture looked like one of the most successful industrial sallies of 1950.



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The commercial type as shown at the right . . . ready to rig up. Rigging is simple necessitating only passing a steel leader through from "tail to snoot."

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Any of those purchased during 1950 will be cheerfully replaced upon request of authorized purchasing agent for the tuna clipper.

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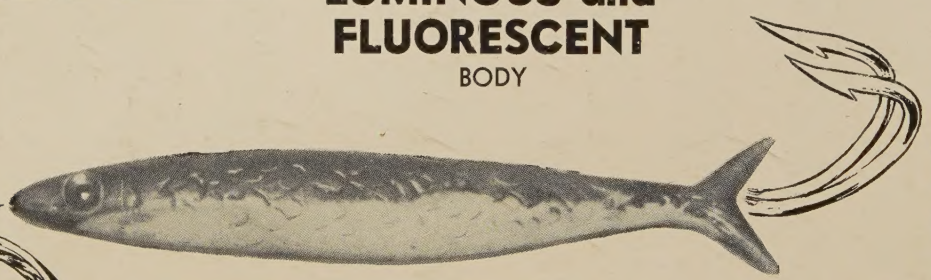

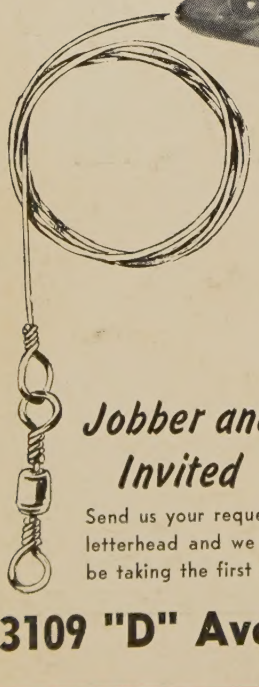

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